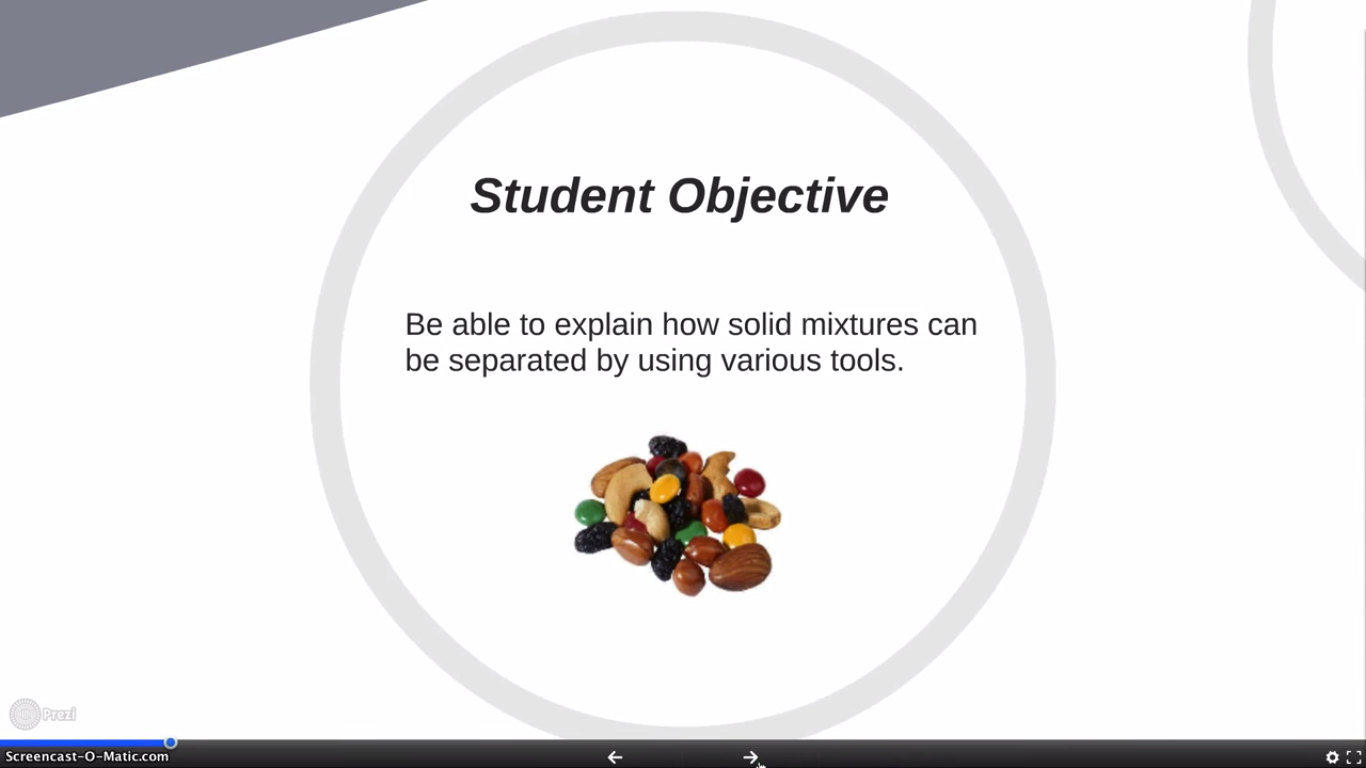
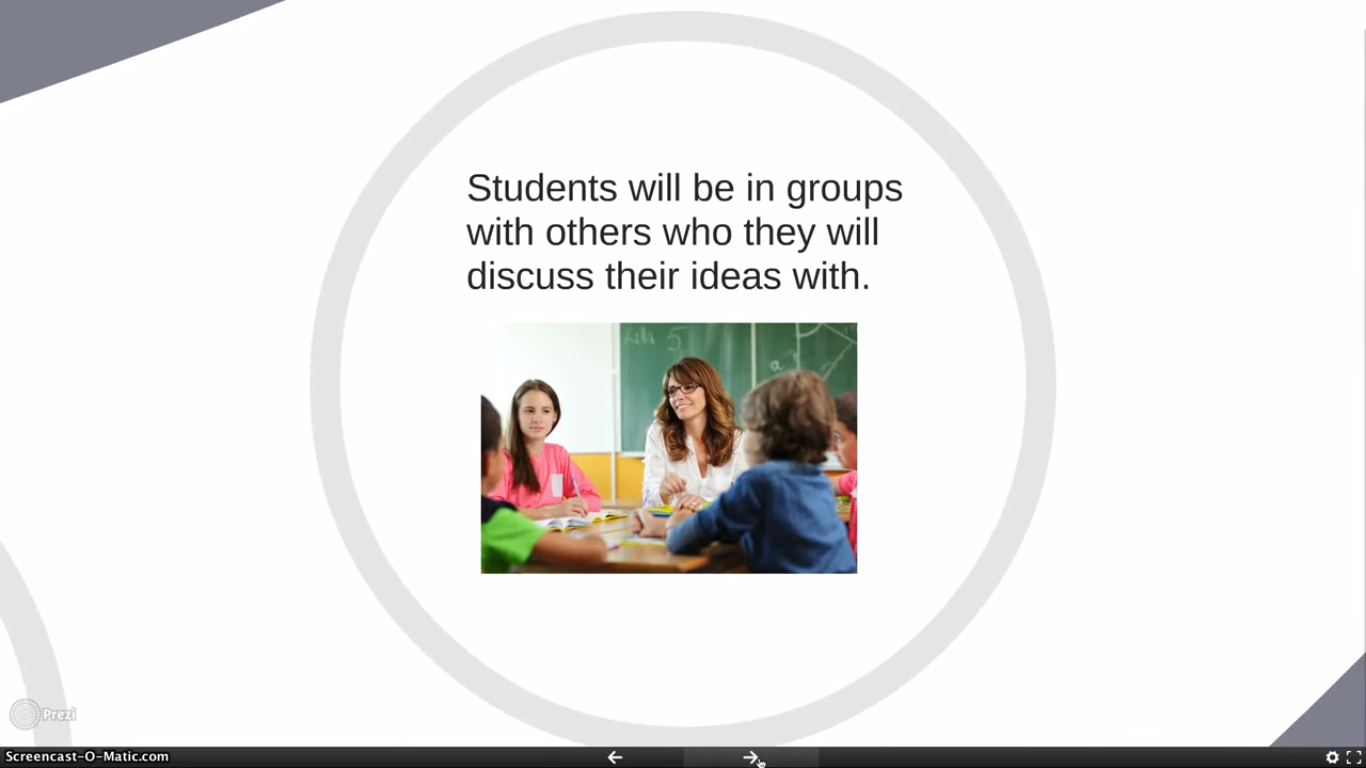
This is a lesson on separating solid mixtures, which would be done in a fifth grade classroom.



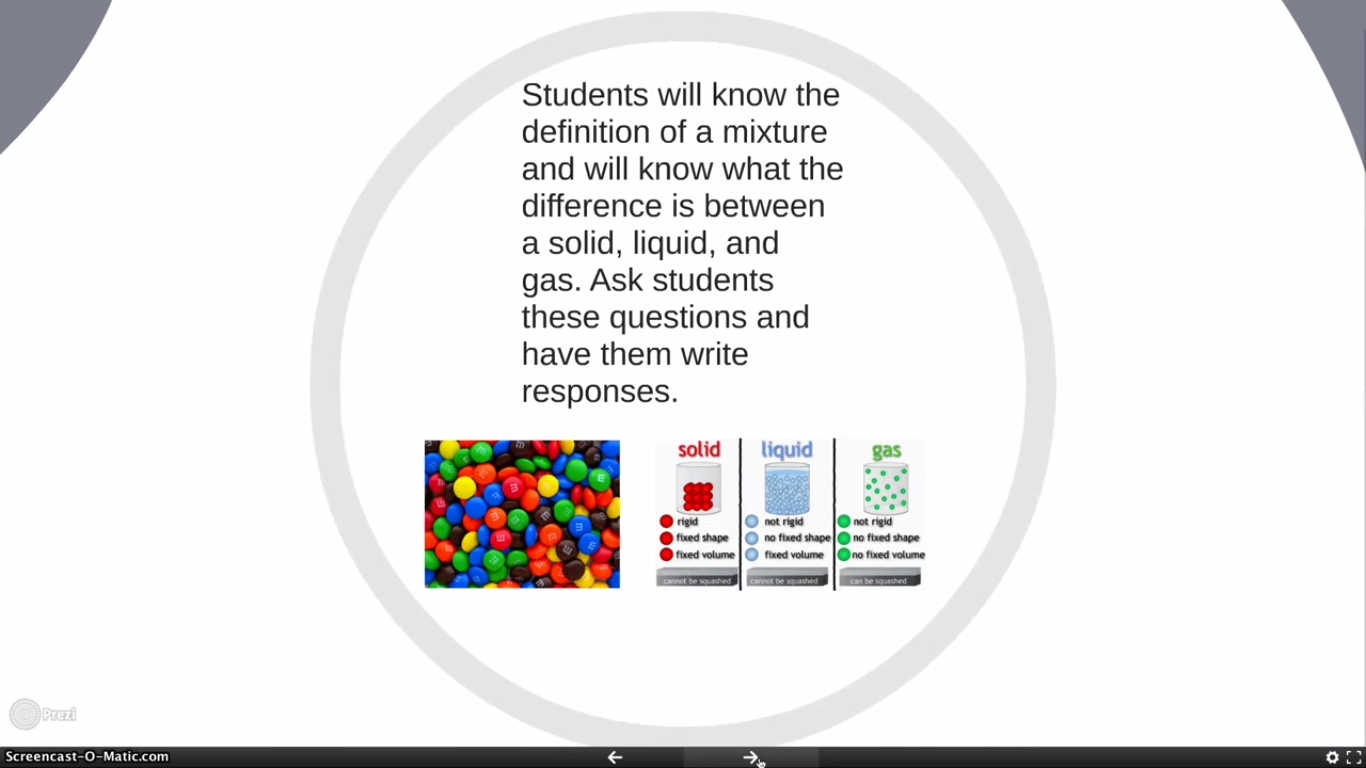
1. The objective of the students will be to explain that solid mixtures can be separated by shape, color, particle size, and magnetic attractions using various tools.



2. Students will be in groups with others they will be working with and discussing ideas with.

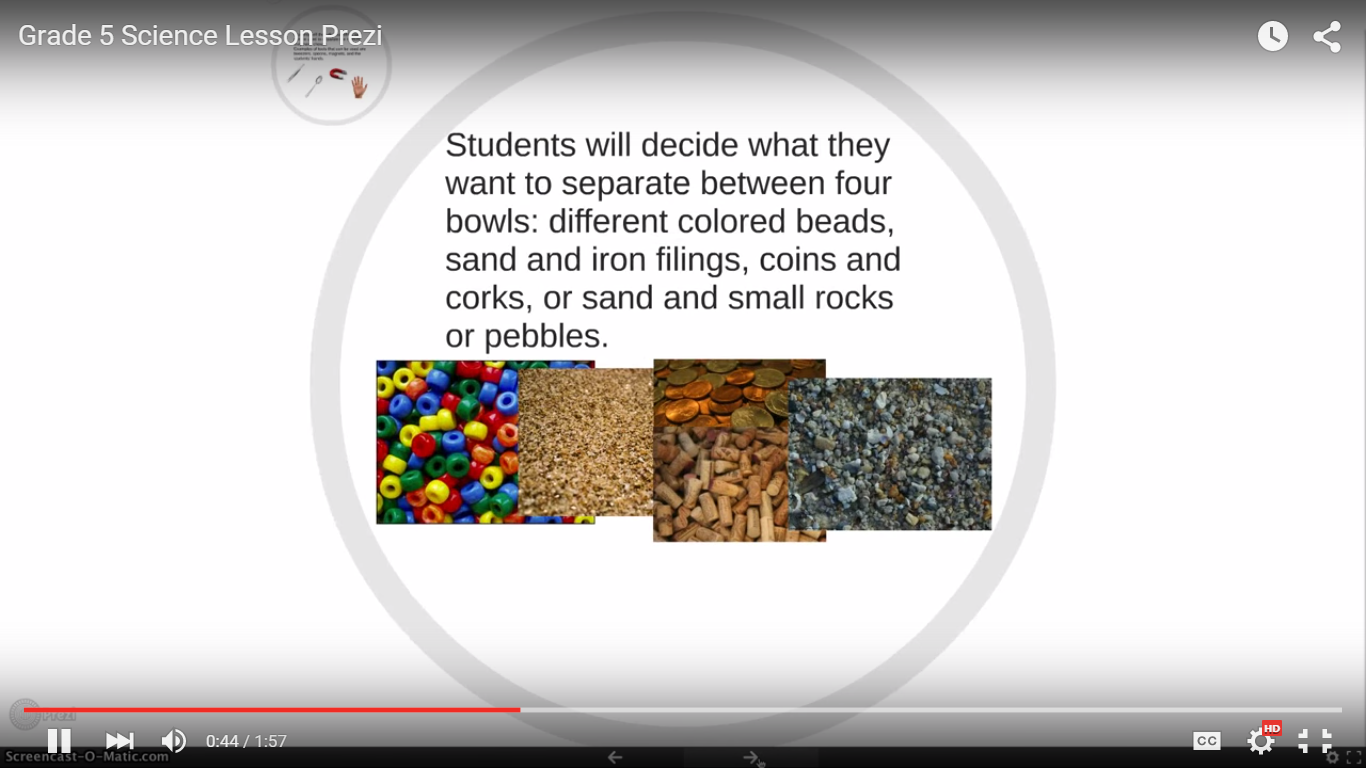


3. Before this lesson, students will know the definition of a mixture and would have worked with mixtures before. Students will also know what a solid is compared to a liquid and gas.



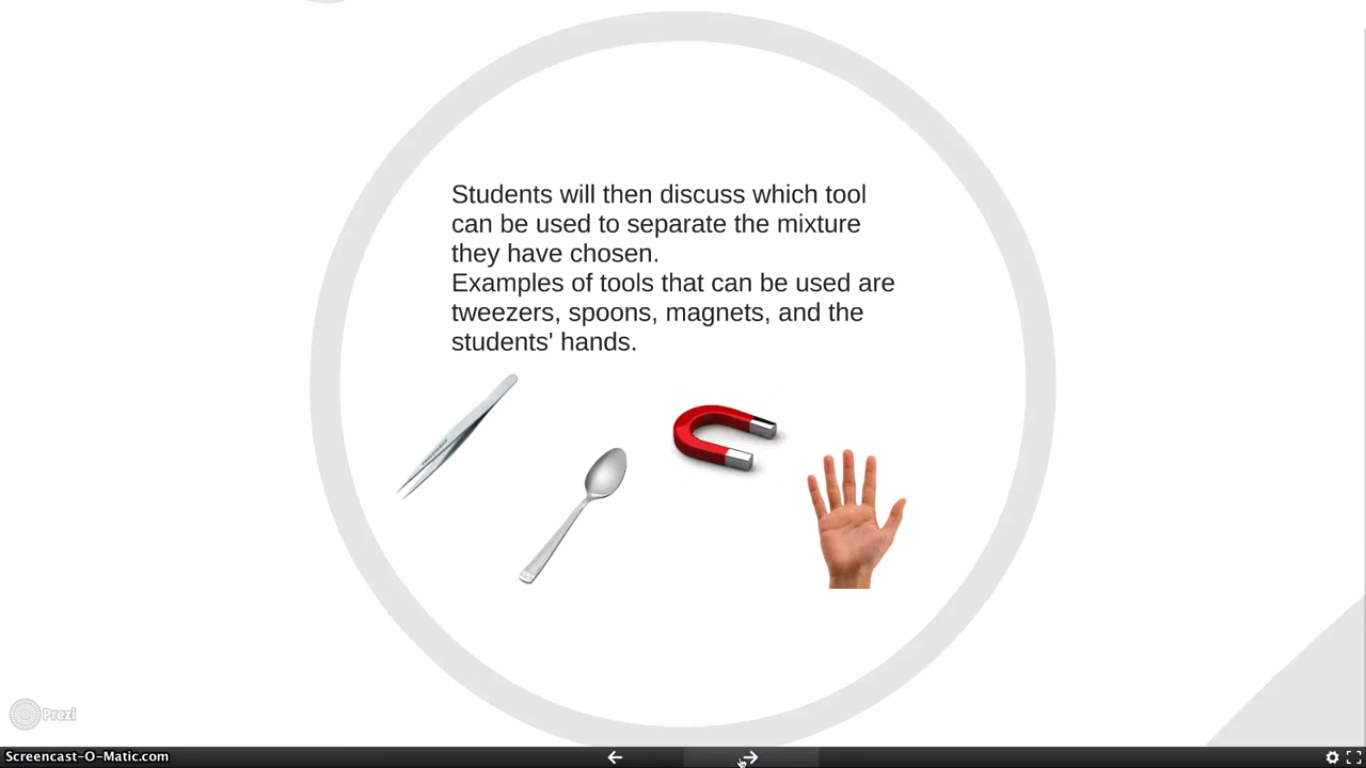
4. Ask the students about mixtures, such as what they are and how they can be separated. Have students write their response on an index card.

Students will then be given options of mixtures to choose from between 4 bowls that are labelled 1-4. The first bowl will contain beads of two or more different colors. The second bowl will contain sand and iron filings. The third bowl will contain coins and corks. The fourth bowl will contain sand and small rocks or small pebbles.

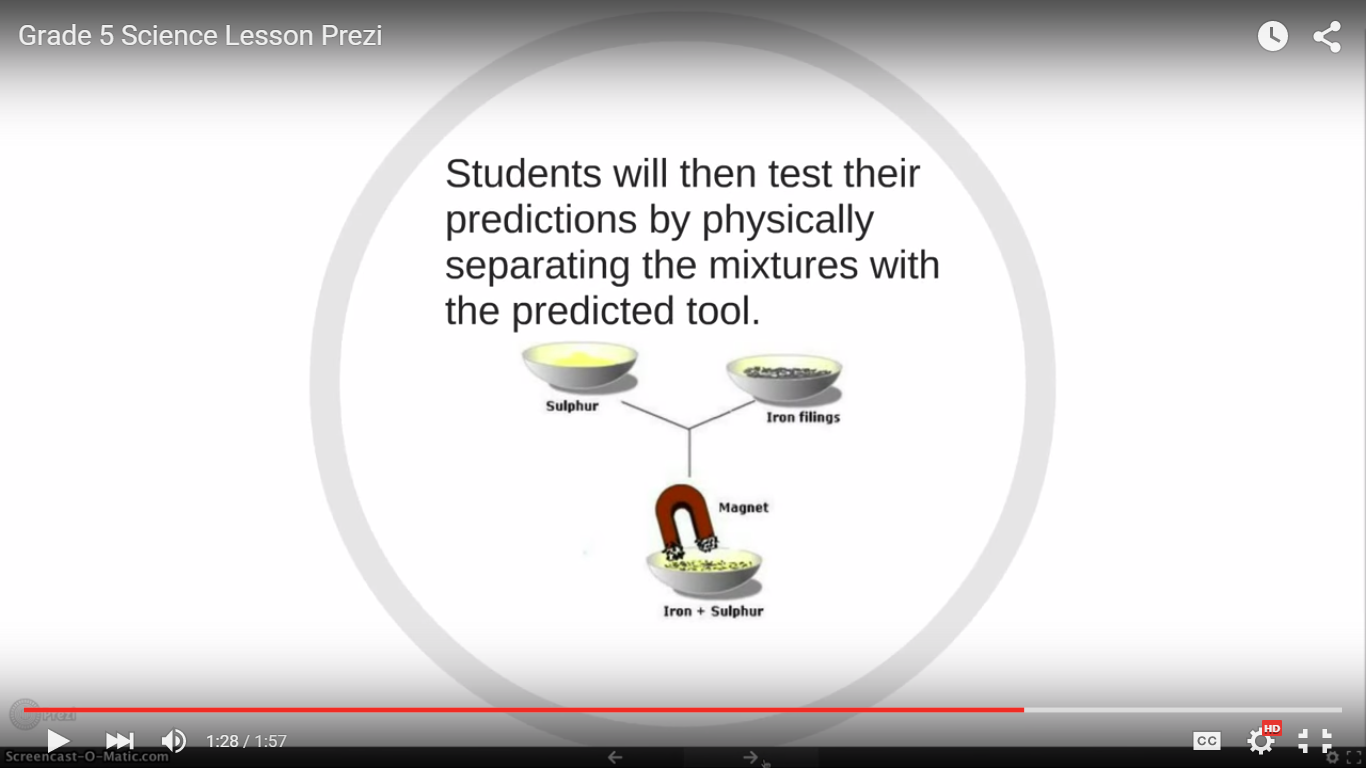


5. After choosing the bowl that has the mixture that will be separated, students will discuss in their group what tool can be used to separate the mixture.

Examples of tools that can be used are tweezers, spoons, magnets, the hands of the students, and anything else the students can use to separate the mixture.



6. Students will then test their predictions by physically separating the mixture with the predicted tool.



7. Students will then discuss what they found and will comment on their predictions, ideas, and how they decided on a tool. This will be done in groups.

After they have discussed how their experiment went, the whole class will discuss what they found by sharing their groups’ information.

